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# Canada's Role in Science and Technology for Development

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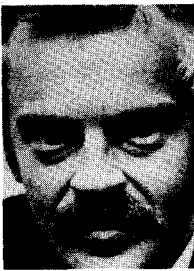
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## The Swedish Agency for Research Cooperation With Developing Countries

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I have been asked to talk about the Swedish Agency for Research Cooperation with Developing Countries (SAREC). But before I do so, I will take a brief but broader look at Swedish research for development of developing countries. In 1977 an inquiry was circulated to virtually all university institutions in Sweden. More than 810 institutions reported 391 projects, which constituted an increase of almost 100% since a similar inquiry was made in 1971. The total cost of these projects was estimated to be \$15 million. This was about 8% of the total universities' budget for research and development in Sweden that year. Almost one-third of these projects had at least part of their financing from outside Sweden, less than one-third of all the projects took place only in Swe-

den, and two-thirds of the projects were executed partly in Sweden and partly in developing countries. Almost half of all the projects were partially executed by scientists from developing countries, and another 12% involved only scientists from developing countries.

Now to the point: only 8% of all this development research was financed by SAREC and only a small part was financed by the Swedish International Development Agency (SIDA) as an integral part of their aid activity. This shows that a substantial volume of development research is being carried out mostly in a useful way without even the existence of bodies especially designated for supporting development research.

What is SAREC then? It was started in 1975. Many of the ideas constituting the basis of the organization were stolen from IDRC. SAREC, to simplify the description a bit, is mainly a sum of money, some basic ideas about how to spend it, and a group of people to operate the agency. As with most organizations, the basic ideas and policies of SAREC were established with great pain and compromise. I shall recite for you from a simple brochure the main purposes of SAREC:

The objectives of SAREC are to assist in the development and strengthening of a scientific and technological infrastructure in developing countries in order to lessen their dependence on developed countries and increase their capacity for the establishment of economic and social justice.

It is a rather complicated statement, and there have obviously been different forces in action to get something that could be agreed upon by everybody.

The same is true of the mandate of SAREC, which has five points in a somewhat peculiar order:

- To advise the government on the program of research financed by the Swedish aid fund;
- To process research projects and programs up to the stage of decision by the Swedish International Development Authority (SIDA) and the government;
- To cooperate with SIDA and the National Research Councils, i.e., the granting councils;
- To initiate research projects and programs; and
- To follow the programs of international organizations and institutions for science and technology in other countries.

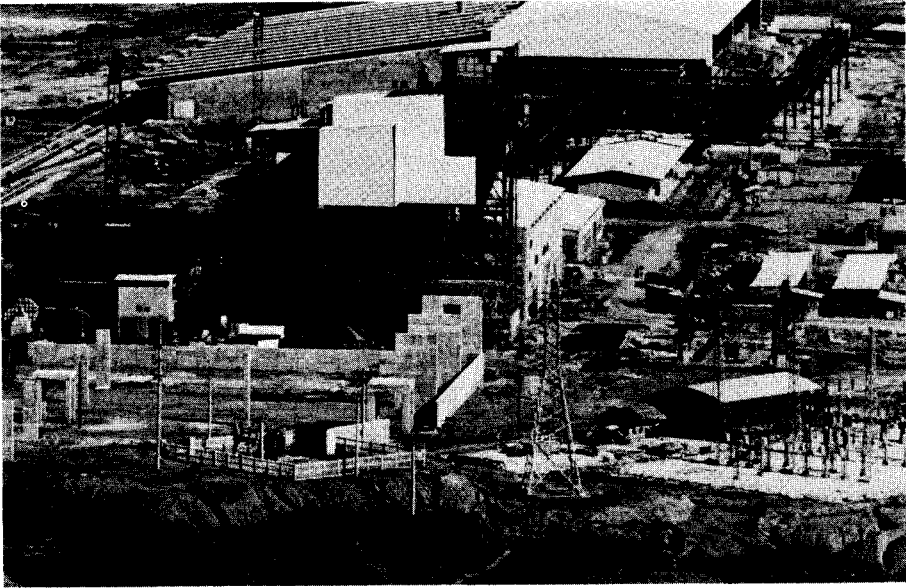
When SAREC was created, its funds came out of the aid funds, and SIDA, naturally, objected to the creation of a body that would cut into its money. Now, they complement each other. Although SIDA frequently supports research and development as an integral part of aid programs, SAREC supports longer-term research. For example, SAREC's recent cooperation with India on research into oil seeds and their use for different purposes may lead in 5 years to an application to SIDA from India for aid to put up a prototype installation for the processing of oil seeds into proteins or whatever.

SAREC, by its mandate, is the permanent advisory group on research matters for SIDA. Fortunately, the cooperation has been good. The sum of money set aside for development research this year is roughly \$31 million, up about 31% from last year. Decisions on spending are made by SIDA and, on very large projects, by the Cabinet following advice from SAREC. During SAREC's first 3 years not a single suggestion was turned down by SIDA or the Cabinet. In reality, SAREC decides on the use of the Swedish development research funds.

Of the \$31 million, \$21 million is more or less tied to international research programs. This money does not, however, disappear as a blank cheque; in fact, SAREC is trying hard to influence the international organizations to use their money as much as possible in accordance with SAREC policies. The remaining \$10 million is divided among three programs: research projects in individual developing countries (\$4 million); research projects involving cooperation between developing countries (\$3 million); and development research in Sweden (\$2.5 million). Administrative costs account for the remaining \$500 000.

I shall come back in a moment to the content of the research that is supported, but first I should like to say a few words about the organizational setup. The total SAREC staff is 18. Almost all of them are professionals with experience in either science or development activities and, in most cases, both. These 18 people include a research director and an administrator. All of the personnel have been chosen to complement each other's experience, but all have to be prepared to handle multiregional or multidisciplinary questions.

SAREC has a Board of Governors; all 12 members are Swedes. The chair is a provincial governor. Two members are members of Parliament, two members come from government departments, and five members come from Swedish universities. The other two members are the President of SIDA and the Research Director of SAREC, a renowned scientist. SAREC has five permanent advisory groups; they are all Swedish and exist only to comment upon or initiate development research in Sweden, which is a small part of the research supported. All other external advice is caught wherever it can be



*Whereas funding of Kr 2 billion for the construction of Bai Bang forest industry in Vietnam is expected to come from SIDA, the research agreements for the project would be mediated by SAREC.*

found, on an ad hoc basis, depending on the problems encountered in connection with the various projects in hand. Of course, plenty of advice is solicited in the developing countries.

Now I come to the content of the research that is supported. The first program, research in individual developing countries, has a modest budget of \$4 million. I am told that half the money goes to fund research in developing countries, carried out when possible by an organization in a developing country. That organization decides what project to support and how to use the money. There have been certain biases in spending. In one country, for example, all the money went to buy instruments 1 year and the following year all of it was used to pay salaries on a very few projects. You can see different uses to which the money is put, some with logic, some without logic. But generally leaving the responsibility with the developing country is important because it helps the country establish its own planning, its own priorities, and its infrastructure for planning and for research funding. Also, when needed, SAREC establishes contact between developing countries and advisers from Sweden; for instance it has mediated agreements for advice for Sri Lanka, Vietnam, and Zambia. Earlier, it had an agreement with Cuba and will again. And I understand that such an agreement will be worked out with Mozambique.

The second program, research projects involving cooperation between developing countries, has been supported recently in Latin America. Although needs are great there, many of the political situations are viewed with mixed feelings in Sweden, and it is sometimes difficult to plan things in a neutral way so as not to offend anyone in Latin America or in Sweden. In any case, this is the region where this type of support has mostly been given.

I might say a few words about the research being done in Sweden. There has been some criticism of SAREC in regard to this research because there

appears to be a heavy dominance of the social sciences. We shall probably see this situation change in the coming years, with a greater emphasis on technology and the natural sciences.

As to SAREC's future, there is a proposal before Parliament now, and a decision will probably be taken later this month, to make SAREC formally independent of SIDA. We will probably also see a larger percentage of funds going to projects in individual developing countries: this is the area that SAREC wishes to stress in the future. And, as I suggested, we will likely see more support in Swedish development research going to technological and natural science.

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